

**METHOD AND APPARATUS FOR ANALYZING A DISTRIBUTION****Abstract of the Invention**

A method, apparatus, and article of manufacture for analyzing a measurable distribution having random components and deterministic components. The method includes the steps of collecting data, constructing a probability density function based on the data such that the probability density function is a convolution of deterministic functions and random functions, constructing a probability density function based on a deterministic and random convolution model having three or more parameters wherein at least one of the parameters are unknown, and determining unknown parameters by using a deconvolution process.